

REMARKS

I. Status of the Claims

Claims 1-2, and 4-14 were pending in the application prior to this submission. Claims 1-2, and 4-14 stand rejected. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With this Amendment, claims 1, 2, 13 and 14 have been amended. Claim 4 is hereby canceled without prejudice or disclaimer. No new matter has been introduced, and thus, entry and consideration of this Amendment is respectfully requested.

II. Rejections Under 35 U.S.C. § 103(a)

Claims 1-4, 6, 8, 9, 11, 13 and 14 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 7,061,530 to Koyama (hereafter “Koyama”) in view of U.S. Patent No. 6,897,699 to Nguyen (hereafter “Nguyen”).

Claims 5, 7, 10 and 12 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Koyama in view of Nguyen and further in view of U.S. Patent No. 6,160,578 to Carroll (hereafter “Carroll”).

Applicant respectfully requests reconsideration of the pending claims in view of the amendments now presented herein. For example, independent claim 1 has been amended for further clarification to recite:

An image sensing apparatus having an image sensor for sensing an image of an object, comprising:

a temperature sensor that measures temperature;

an analog-digital converter that operates at a predetermined frequency and converts an analog signal read from the image sensor to a digital signal; and

a controller that controls a relationship between a phase of a timing signal for reading out the analog signal from the image sensor and a phase of a timing signal for operating said analog-digital converter in accordance with the temperature measured by the temperature sensor,

wherein said controller uses the timing signal having a first phase when the measured temperature is in a first range, and uses the timing signal having a second phase when the measured temperature is in a second range.

Applicant respectfully submits that Koyama and Nguyen, taken either alone or in combination, do not teach or suggest an image sensing apparatus comprising “a controller that controls a relationship between a phase of a timing signal for reading out the analog signal from the image sensor and a phase of a timing signal for operating said analog-digital converter in accordance with the temperature measured by the temperature sensor, wherein said controller uses the timing signal having a first phase when the measured temperature is in a first range, and uses the timing signal having a second phase when the measured temperature is in a second range” as recited in at least amended independent claim 1. Amended independent claim 13 recites similar features to independent claim 1 as described herein.

The Office Action asserts that Koyama discloses the above limitation. However, the cited portion of Koyama merely discloses that “[t]he clock generating circuit 13 includes k clock phase difference generating circuits 16 18 each shifting a phase of the basic clock signal ADCK1 by a specified different value and supplying the signal to the A/D converter 14 as a clock signal ADCK2.” Koyama and Nguyen provide no teaching or suggestion of using the timing signal having a first phase when the measured temperature is in a first range, and using the timing signal having a second phase when the measured temperature is in a second range.

Independent claim 14 recites:

A control method of an image sensing apparatus having an image sensor for sensing an image of an object and an analog-digital converter which operates at a predetermined frequency and converts an analog signal read from the image sensor to a digital signal, comprising:

relatively shifting in time sequence a phase of a timing signal for reading out the analog signal from the image sensor and a phase of a timing signal for operating the analog-digital converter; and

determining a relationship between the phase of the timing signal for reading out the analog signal from the image sensor and the phase of the timing signal for operating said analog-digital converter on the basis of a comparison between signals obtained by converting the analog signal by the analog-digital converter for each shifted phase.

Applicant respectfully submits that Koyama and Nguyen, taken either alone or in combination, do not teach or suggest a control method comprising “determining a relationship between the phase of the timing signal for reading out the analog signal from the image sensor and the phase of the timing signal for operating said analog-digital converter on the basis of a comparison between signals obtained by converting the analog signal by the analog-digital

converter for each shifted phase” as recited in at least independent claim 14. Amended independent claim 8 recites similar features to independent claim 14 as described herein.

With respect to the distinguishing feature, the Office Action asserts that “the comparison signal is obtained by relatively shifting in time sequence the phase of the two timing signals.” However, the relationship between the two timing signals is obtained based on the comparison between signals obtained by converting the analog signal by the analog-digital converter for each shifted phase.

The Office Action further asserts that “Nguyen teaches obtaining phase difference signals by relatively shifting the phase in time sequence”. However, the cited portion of Nguyen provides no teaching or suggestion of obtaining the relationship between the two timing signals based on the comparison between signals obtained by converting the analog signal by the analog-digital converter for each shifted phase.

In view of the above, independent claims 1, 8, 13 and 14 are believed distinguishable over the cited references (i.e., Koyama and Nguyen) for at least the reasons discussed above.

Reconsideration and withdrawal of the rejections of claims 1, 8, 13 and 14 under 35 U.S.C. §103(a) is respectfully requested.

Applicant has chosen in the interest of expediting prosecution of this patent application to distinguish the cited document from the pending claims as set forth above. However, these statements should not be regarded in any way as admissions that the cited document is, in fact, prior art.

Applicant has not specifically addressed the rejections of the dependent claims. Applicants respectfully submit that the independent claims, from which they respectively depend either directly or indirectly, are in condition for allowance as set forth above. Accordingly, the dependent claims also are in condition for allowance. Applicant, however, reserves the right to address such rejections of the dependent claims in the future as appropriate.

Applicant believes that the application, as amended, is in condition for allowance and such action is respectfully requested.

CONCLUSION

Based on the foregoing amendments and remarks, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims and allowance of this application.

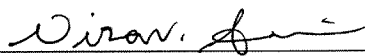
AUTHORIZATION

The Commissioner is hereby authorized to charge any additional fees which may be required for consideration of this Amendment to Deposit Account No. **13-4500**, Order No. **1232-5207**. A DUPLICATE OF THIS DOCUMENT IS ATTACHED.

In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No **13-4500**, Order No. **1232-5207**. A DUPLICATE OF THIS DOCUMENT IS ATTACHED.

Respectfully submitted,
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Dated: August 25, 2008

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